

Names of group members:

SCH4U – Periodic Trends Activity Sheet

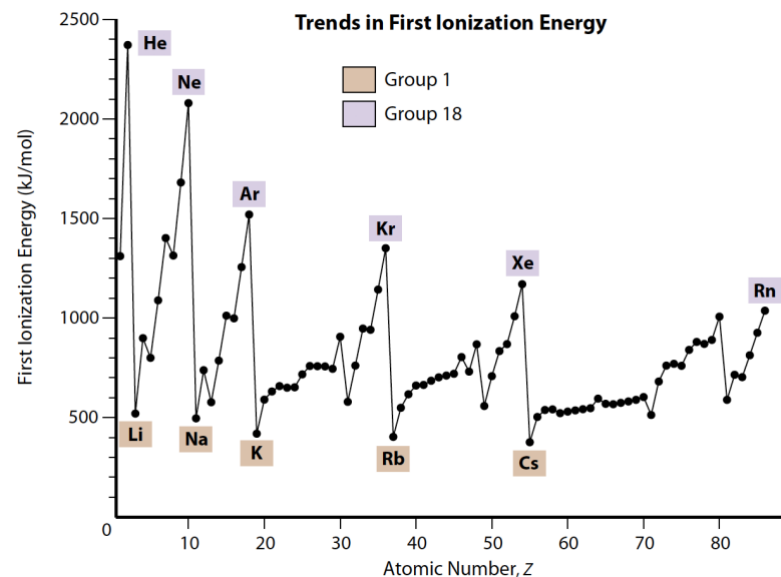
Atomic Radius

Draw what you believe to be the size of the main-group elements (group 1,2, 13 to 18).

1	2	13	14	15	16	17	18
H							He
Li	Be	B	C	N	O	F	Ne
Na	Mg	Al	Si	P	S	Cl	Ar
K	Ca	Ga	Ge	As	Se	Br	Kr
Rb	Sr	In	Sn	Sb	Te	I	Xe
Cs	Ba	Tl	Pb	Bi	Po	At	Rn

Energy of Ionization

Examine the following graph of first ionization energy versus the atomic number for elements of Periods 1 to 6.



Electron Affinity

Examine the following table of values of the first electron affinity for elements of Periods 1 to 6.

1	Electron Affinities						8
H -72.8	2						He (0.0)
Li -59.6	Be ≤0						Ne (+29)
Na -52.9	Mg ≤0						Ar (+35)
K -48.4	Ca -2.37						Kr (+39)
Rb -46.9	Sr -5.03						Xe (+41)
Cs -45.5	Ba -13.95						Rn (+41)
		3	4	5	6	7	
		B -26.7	C -122	N +7	O -141	F -328	
		Al -42.5	Si -134	P -72.0	S -200	Cl -349	
		Ga -28.9	Ge -119	As -78.2	Se -195	Br -325	
		In -28.9	Sn -107	Sb -103	Te -190	I -295	
		Tl -19.3	Pb -35.1	Bi -91.3	Po -183	At -270	

Images were taken from McGraw-Hill Ryerson Chemistry 12 textbook.